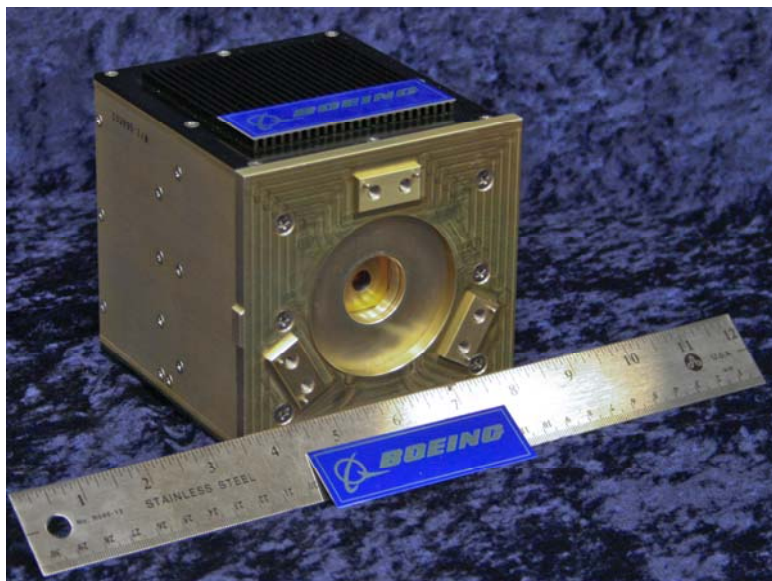
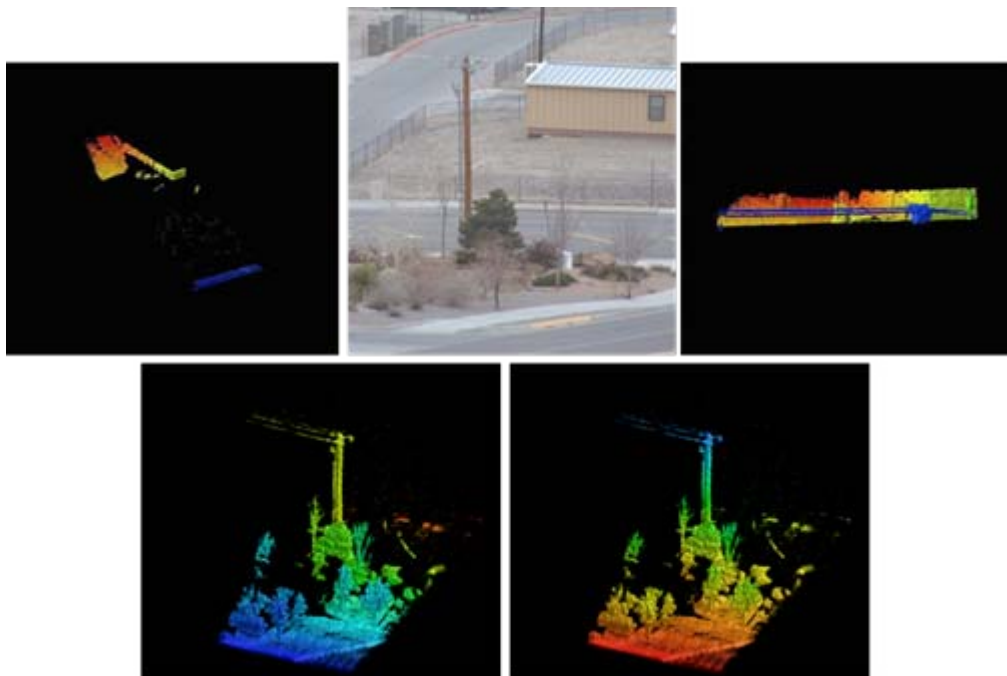


Single Photon 3D LADAR Camera

A compact, self contained photon counting LADAR receiver for 3D imaging



- Single Photon Sensitivity
- Geiger-Mode Operation
- 1.0 – 1.6 micron Wavelength Operation
- Long Range Operation
- Camera Link
- Low Power Operation
- Image Acquisition Software
- Suitable for Airborne Applications

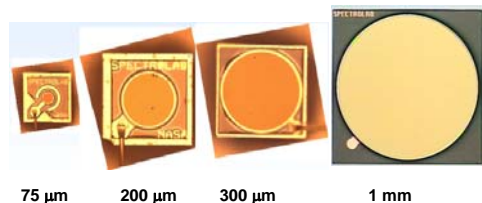


Spectrolab

Sensor Products

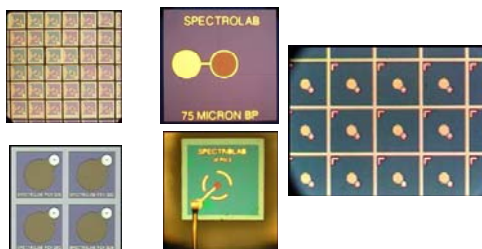
www.spectrolab.com

Front-Illuminated APD Dies

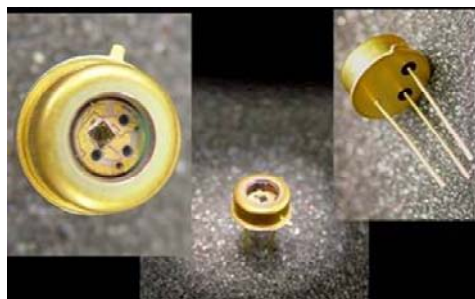


75 μm 200 μm 300 μm 1 mm

InGaAs PIN Dies



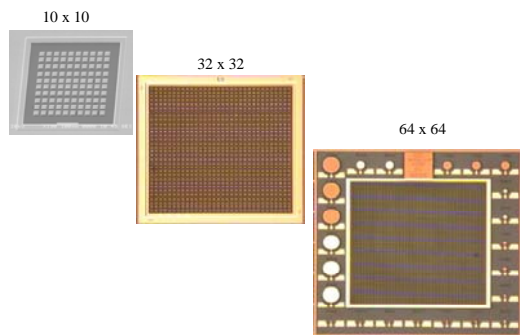
First Large-area (1mm) InGaAs APD



InGaAs PIN Packaged Dies

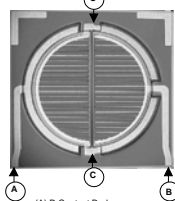


APD Array Evolution



2V Laser Power Converter

2V Power-by-Fiber converter micrograph



- 1W Fiber Illumination @ 800-840nm
- Optical density equivalent to 700X AMO sun concentration
- Monolithic integration of two single junction GaAs elements
- 45% conversion efficiency achieved despite high optical obscuration and losses (up to 20%)

Laser Power Converter

